

oxygen. It has, of course, the hook under the fuselage for picking up messages.

The standard armament consists of three machine guns, two of them in the wheel fairings and a Lewis gun for the observer. As already mentioned, when used as a bomber, the machine carries the bombs on two small stub wings bolted to and easily removable from the under-carriage U-tube.

One very great advantage of the unusual placing of machine guns and bombs is the remarkable accessibility. "Bombing-up" and machine-gun adjustments and inspection can be carried out conveniently, as the height above the ground is but two or three feet. The Service will appreciate this feature when in the field.

With an empty weight of 4,065 lb. and a disposable load of 1,855 lb., the Lysander has a gross weight of 5,920 lb. When fully loaded it has the following speeds:—

Sea level .. .. .	206 m.p.h.
5,000ft. .. .. .	220 "
10,000ft. .. .. .	229 "
15,000ft. .. .. .	223 "
20,000ft. .. .. .	212 "

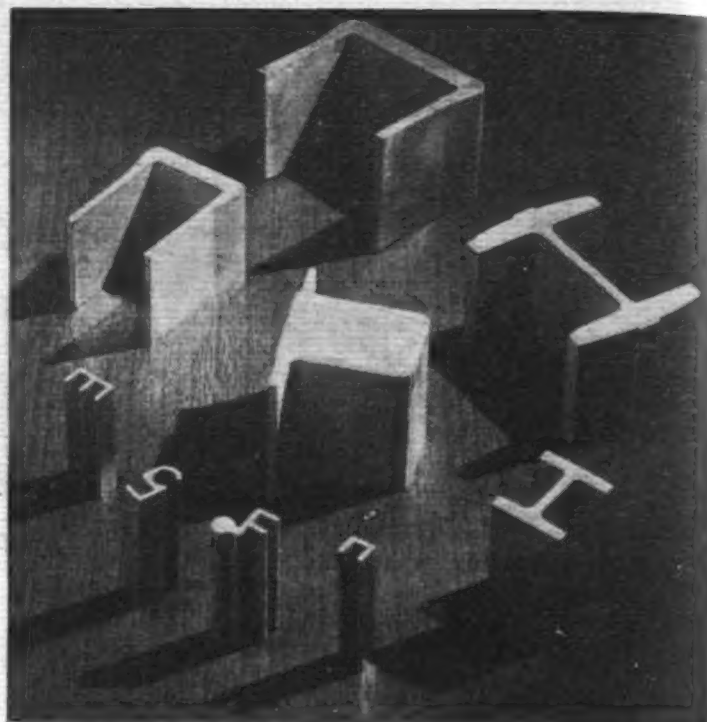
The minimum flying speed (engine on) is 55 m.p.h., and the landing speed 52 m.p.h. It will be appreciated that a speed range of 4:1 is very remarkable.

The sea level rate of climb is 1,650ft./min., and the different altitudes are reached as follows:—

5,000ft. in 3.1 min.	15,000ft. in 11.4 min.
10,000ft. in 6.8 "	20,000ft. in 19.5 "

At 5,000ft. the rate of climb is 1,530ft./min.; at 10,000ft. 1,180ft./min.; at 15,000ft. 830ft./min.; and at 20,000ft. 500ft./min. The service ceiling (height at which rate of climb has dropped to 100ft./min.) is 26,000ft. approximately.

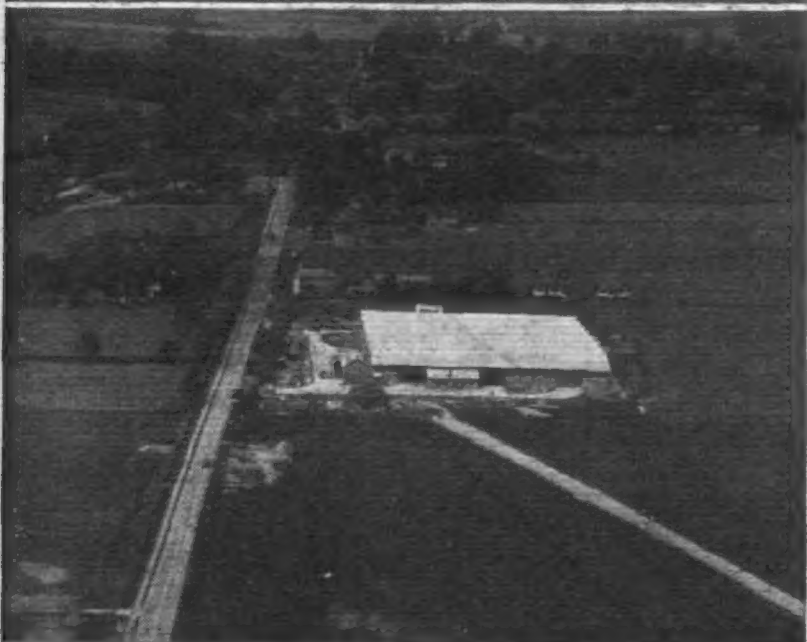
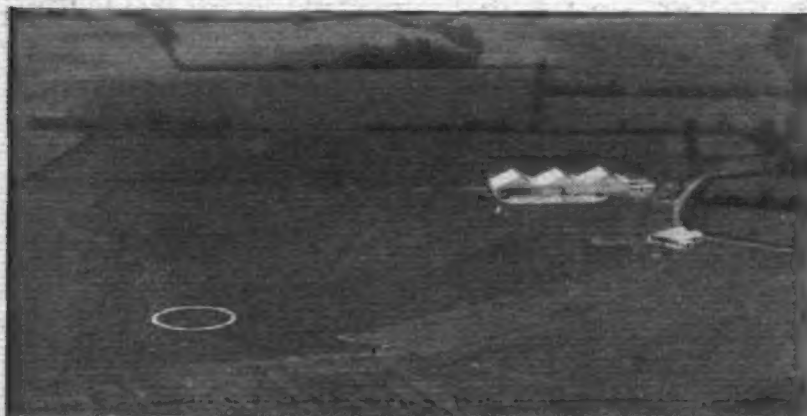
The economical cruising speed is 150 m.p.h., and the range in still air at that speed is 600 miles. With full load the take-off distance to clear a 50ft. obstacle is 230 yards,



Reynolds extrusions used in the Lysander. The smaller ones are used for window frames and similar purposes, while the central one is a main wing spar extrusion. Behind that are two standardised channels used extensively for making forked lugs. The extrusion on the right is used for the lift struts.

and the take-off run itself 165 yards. With brakes on the landing run is 200 yards, and the approach distance over a 50ft. obstacle to rest 330 yards.

Altogether, it can be said that the Westland Lysander is a remarkable machine.



"Flight" photograph.

The two outward turning points, the factory at Buntingford (below), and the Barton buildings (above) of International Aircraft, Ltd.

## KING'S CUP RACE

### *The Entry List : Turning Points from the Air*

TWENTY-ONE entries have been received by the R.Ae.C. for the King's Cup Race on Saturday, July 2, which is being flown over a 50-mile circuit from Hatfield, with turning points at Buntingford, Herts, and Barton Airport, Beds. The entries, announced last week-end, are as follows:—

Entrant	Pilot	Aircraft	Engine
Viscountess Wakefield	Capt. E. W. Percival	Percival Mew Gull	Gipsy Six
W. Humble	Entrant	Sparrowhawk	Gipsy Major
S. K. Davies	Flt. Lt. H. T. Ferrand	Percival Gull	Gipsy Six
J. I. Waddington	C. P. Hughesdon	C.W.A. Cygnet	Gipsy Major
Maj. E. Howard	Wing Cdr. F. W. Stent	Miles Monarch	Gipsy Major
S. T. Lowe	Entrant	Comper Swift	Gipsy III
F. C. J. Butler	Entrant	Percival Vega Gull	Gipsy Six
Mrs. J. Sherren	K. Waller	Percival Vega Gull	Gipsy Six
Capt. W. L. Hope	Entrant	Comper Swift	Gipsy III
G. Guthrie	Entrant	Percival Mew Gull	Gipsy Six
L. Fontes	Entrant	Miles Hawk	Gipsy Six
A. Henshaw	Entrant	Percival Mew Gull	Gipsy Six
Viscount Wakefield	F/O. G. R. de Havilland	T K.2	Gipsy Major
L. H. T. Cliff	Entrant	Miles Hawk Major	Gipsy Major
E. G. Thompson	Capt. H. Broad	Parnall Heck	Gipsy Six
Lieut. Gen. Sir Louis Vaughan	J. A. C. Warren	Parnall Heck	Gipsy Six
W. C. Devereaux	—	D.H. Comet	Gipsy Six (Two)
Sqn. Ldr. R. C. T. Edwards	Entrant	Percival Gull	Cirrus Major
J. M. Barwick	Entrant	Miles Hawk Trainer	Gipsy Major
Sir Derwent Hall-Caine	T. M. Morton	B.A.4	Two Gipsy Major
C. H. Tutt	Entrant	Comper Swift	Pobjoy Niagara III